

REVISION OF THE GENUS *INDOSTEGIA* MALAISE
(HYMENOPTERA: TENTHREDINIDAE) IN INDIA

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Abstract.—The genus *Indostegia*, known only from India, includes five species, *I. apicicornis* Malaise, *I. frontata*, n. sp., *I. foveata*, n. sp., *I. vatsi*, n. sp., and *I. ecarinata*, n. sp. The male of *I. apicicornis* Malaise is described for the first time. A key is provided for the species.

Key Words: revision, *Indostegia* Malaise, India, Hymenoptera, Allantinae

The genus *Indostegia* was described by Malaise (1934) for a single species, *I. apicicornis* Malaise from India. It belongs in the subfamily Allantinae as defined by Smith (1979) where it was placed by Abe and Smith (1991). The genus has remained monotypic until the recent discovery of additional species in India. Here we include five species, four of which are new, describe the male of *I. apicicornis* Malaise for the first time, and provide a key to species. Thus far, the genus is known only from India. Host plants are not known, but *Indostegia* is similar to the holarctic genus *Taxonus* Hartig, the larvae of which feed on rosaceous plants such as *Rubus* spp. and *Fragaria* spp., and the larvae of *Indostegia* may do the same.

Holotypes of the new species are deposited at the Indian Agriculture Research Institute, Pusa National Collection, Division of Entomology, New Delhi, India. Other specimens are at Punjabi University, Patiala, India (PUP), and the National Museum of Natural History, Smithsonian Institution, Washington, DC (USNM).

Abbreviations used in text are: EL = eye

length; IATS = inner apical tibial spur; ICD = intercenchri distance; IDMO = interocular distance at level of median ocellus; ITD = intertegular distance; LID = lower interocular distance; MB = metabasitarsus; OATS = outer apical tibial spur; OCL = oculoocipital distance; OOL = oculoocellar distance; POL = postocellar distance.

Indostegia Malaise

Indostegia Malaise 1934: 468–470; Malaise 1963: 186 (in key); Abe and Smith 1991: 40, 103. Type species: *Indostegia apicicornis* Malaise 1934, by original designation.

Description.—Antenna 3.4–4.0× head width, scape longer than broad, pedicel as long as broad, flagellum more or less strongly compressed and tapering towards apex (instead of flagellum, except for three basal segments, strongly compressed, as stated by Malaise 1934); clypeus (Fig. 3) with transverse convexity, very widely and deeply incised with sharp, depressed, lateral lobes; labrum rounded, broader than long, flat and shining; inner margins of eyes parallel, lower interocular distance greater than

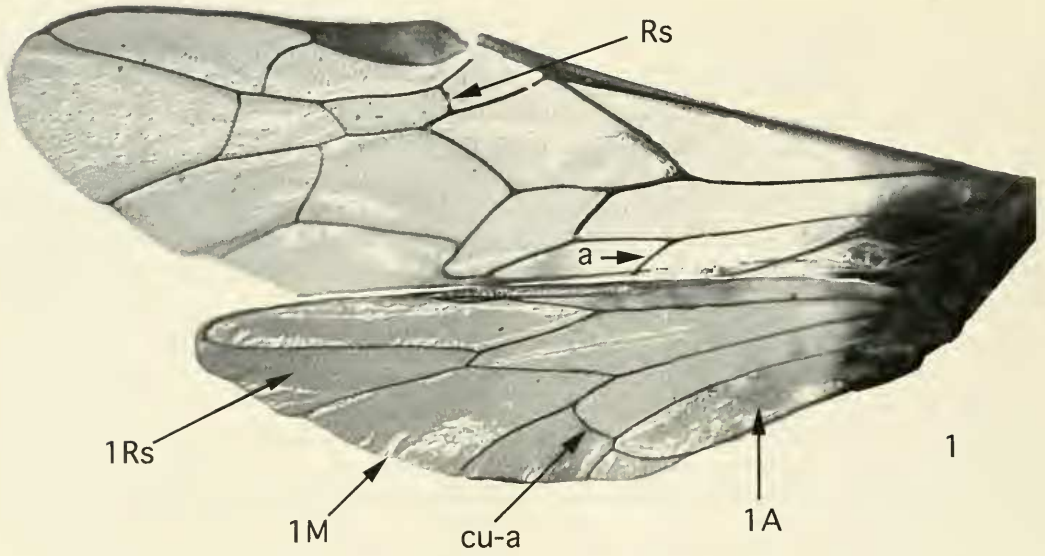


Fig. 1. Forewing and hindwing of *Indostegia frontata*.

eye length (Fig. 3); malar space equal to or broader than diameter of median ocellus (instead of malar space $1.5\times$ diameter of median ocellus, as stated by Malaise 1934); genal carina present except behind postocellar area; lower margin of eye below level of antennal sockets; epicnemium absent; mesoscutellum roundly elevated to subconvex; metabasitarsus subequal or slightly shorter in length to following tarsal segments combined; tarsal claw with subapical tooth slightly shorter than apical one, basal lobe distinct or low and indistinct (instead of basal lobe very minute but distinct, as stated by Malaise 1934). Forewing (Fig. 1) with anal cross vein (a) joining 1A at a 35° – 40° angle; 1st cubital crossvein (Rs) present. Hindwing (Fig. 1) without closed middle cells (1Rs and 1M); anal cell (1A) sessile; cu-a meets apex of anal cell at a slightly oblique angle.

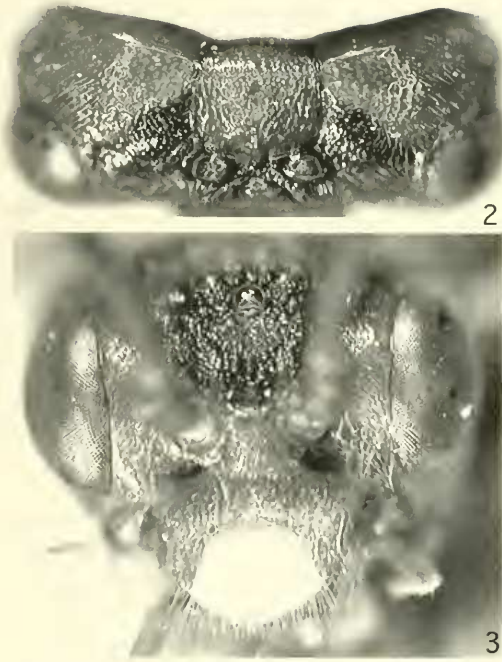
Discussion.—Since *Indostegia* was based on one species, represented by only one female, the generic limits were rather narrow. We have slightly broadened the generic concept as noted parenthetically above.

Indostegia is close to the holarctic *Taxonus*, especially the wing venation, cleft tarsal claws with a basal lobe, deeply emar-

ginated form of the clypeus, and similarity of the male genitalia (Smith 1979: figs. 274–285). *Indostegia* can be separated by the laterally flattened flagellar segments, usually segments three to apex, and the exceptional length of the antenna which is more than three times the head width. The flagellar segments of *Taxonus* are rounded and the antennae are not more than twice the head width. In Malaise's (1963) key, *Indostegia* goes to the same couplet as *Parasiobla* Ashmead, currently considered a synonym of *Taxonus* (Smith 1979).

KEY TO SPECIES OF *INDOSTEGIA*

- 1. Postocellar area quadrate or longer than broad (Fig. 2); median fovea clearly reaching median ocellus; male valve narrow and elongate (Figs. 22–23) 2
- Postocellar area broader than long; median fovea not reaching median ocellus; male valve oval (Figs. 24–26) 3
- 2. Clypeus roundly incised, anterior margin crenulate (Fig. 4); median fovea with deep pit in anterior half and posteriorly only shallowly reaching median ocellus; postocellar area longer than broad as 5:4; annular hairs on lancet distinct for entire width of lancet (Fig. 18); apex of male valve rounded (Fig. 22) *I. frontata*, n. sp.
- Clypeus rectangularly incised, anterior margin smooth (Fig. 5); median fovea without a pit,



2

3

Figs. 2-3. *Indostegia frontata*. 1, Head, dorsal view. 2, Head, front view.

***Indostegia frontata* Vasu, Saini, and Smith, new species**

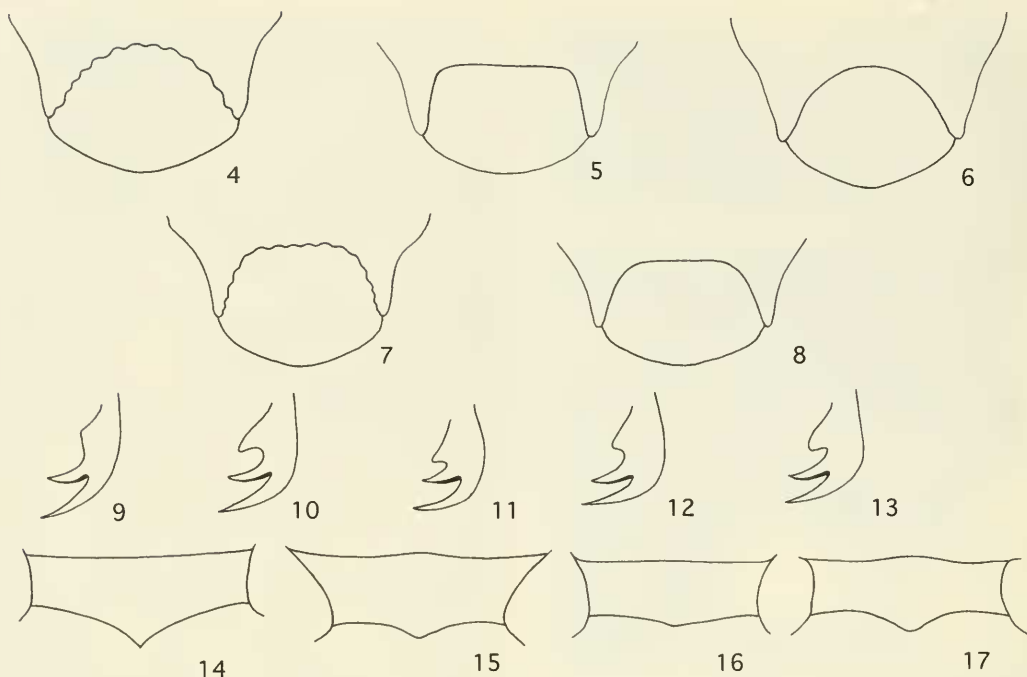
(Figs 1-4, 12, 14, 18, 22, 27)

Female.—*Color*: Black with antennal segments 7 and 8 except apical tip of 8, labrum, posterodorsal and posterolateral margins of pronotum, top of mesoscutellum, extreme posterior and deflexed lateral margins of tergites 2-4, medial broad spot on sternites 2-5, apical ¼ of coxae, trochanters and adjacent parts of femora, and metatarsus except metabasitarsus whitish yellow; scape, pedicel, antennal segment 3 more or less, mandible base, clypeus, head except frontal spot, lateral margins of mesonotal middle lobe meeting at apex, tegula, posterior and lateral slopes of mesoscutellum, medial spot on tergites 7-9, pro- and mesofemora, outer surface of metafemur, tibiae, pro- and mesotarsi, and metabasitarsus fuscoferruginous. Wings hyaline, basal ⅓ of stigma fulvous, rest of stigma and veins piceous.

Structure: Average length 9.5 mm. Antennal length 3.8× head width, scape length 1.25× its width, antennal segments 3 and 4 subequal in length as 7:8, flagellum strongly compressed and flattened except basal 3 segments. Clypeus (Figs. 3-4) roundly incised with crenulate anterior margin. Malar space equal to diameter of median ocellus; LID:IDMO:EL = 3:3:2. Supraclypeal and supraantennal pits well marked, supraantennal tubercles low and confluent with indistinct frontal ridges; frontal area anterior to median ocellus broadly and roundly heart-shaped, gradually and only very faintly depressed towards center, with median fovea in form of a narrow streak shallowly reaching median ocellus; post-, inter- and circumocellar furrows distinct, lateral furrows deep, distinct and ending abruptly just before hind margin of head; postocellar area convex with a faint median carina at its anterior ¼, longer than broad as 5:4; head slightly widened behind eyes, OOL:POL:OCL = 5:4:6. Mesoscutellum roundly elevated without carina, appendage with faint

broad, deep, ditchlike and clearly reaching median ocellus; postocellar area as long as broad; annular hairs on lancet absent to indistinct (Fig. 20); apex of male valve acute (Fig. 23) . . . *I. fov-*
cata, n. sp.

- 3. Lateral furrows of postocellar area reaching hind margin of head; mesoscutellar appendage ecarinate; clypeus roundly incised (Fig. 6) (lancet as in Fig. 21, serrulae low, serrate) *I. vatsi*, n. sp.
- Lateral furrows of postocellar area abruptly ending just before hind margin of head; mesoscutellar appendage with median carina; clypeus sub squarely incised (Figs. 7-8) 4
- 4. Scape length 2× its apical width; antennal segments 3 and 4 as 3:4; flagellum laterally compressed except 2 basal segments; anterior margin of clypeus smooth (Fig. 8); postocellar area without median carina; tarsal claw with large basal lobe (Fig. 11) *I. ecarinata*, n. sp.
- Scape length 1.25× its apical width; antennal segments 3 and 4 as 8:9; flagellum laterally compressed except 3 basal segments; anterior margin of clypeus crenulate (Fig. 7); ostocellar area with median carina on its anterior ¼; tarsal claw with very minute basal lobe (Fig. 9) (lancet with serrulae narrow, lobelike, Fig. 19) *I. apicicornis* Malaise



Figs 4-17. *Indostegia* species. 4-8, Clypeus and labrum. 4, *Indostegia frontata*. 5, *I. foveata*. 6, *I. vatsi*. 7, *I. apicicornis*. 8, *I. ecarinata*. 9-13, Tarsal claws. 9, *I. apicicornis*. 10, *I. vatsi*. 11, *I. ecarinata*. 12, *I. frontata*. 13, *I. foveata*. 14-17, Female hypopygium. 14, *I. frontata*. 15, *I. foveata*. 16, *I. vatsi*. 17, *I. apicicornis*.

medial longitudinal carina; ICD:ITD = 1:3. Tarsal claw (Fig. 12) with broad basal lobe; metabasitarsus equal to following tarsal joints combined, IATS:MB:OATS = 3:8:2. Lancet (Fig. 18) with 24 serrulae; serrulae serrate; annular hairs extend width of lancet. Hypopygium as in Fig. 14.

Sculpture and pubescence: Frontal area minutely, densely punctured, rest of head with fine punctures, surface shining. Mesonotum punctured like head, posterior and lateral slopes of metascutellum densely covered with large, irregular punctures, appendage with few punctures, surface polished, mesopleuron rugose with dense, large, pit-like confluent punctures on and along its convexity. Mesosternum and mesepimeron minutely punctured. Abdomen impunctate, subshining. Body covered with fuscous pubescence.

Male.—Average length 8.5 mm. Similar to female except for clypeus, medial streak on tergites 2-4, and pro- and mesocoxae

except their extreme bases whitish yellow, and medial spots on propodeum fuscoferuginous. Genitalia: Penis valve (Fig. 22), genital capsule (Fig. 27).

Material examined.—Holotype: ♀, India, Manipur, Ukhrul, 1,700 m, 24.v.1993. Paratypes: 5 ♀, 6 ♂, India, Manipur, Ukhrul, 1,700 m, 21.v - 24.v.1993, deposited in PUP and USNM.

Variation.—The apical tips of antennal segments 6, 7, and 8 may be entirely whitish yellow. The frontal black spot may extend laterally to eye margins but not touching them, posteriorly surrounding the lateral sides of postocellar area. Tergites 7-9 may be fuscoferuginous. The medial spots on propodeum in the male may be entirely black.

Distribution.—India: Manipur.

Remarks.—The longer than broad postocellar area, roundly incised clypeus with the anterior margin crenulate, the deep pit at the anterior half of the median fovea, and

median fovea only indistinctly reaching the median ocellus will distinguish *I. frontata* from other species discussed here. The only other species with the anterior margin of the clypeus crenulate is *I. apicicornis*. This species shares with *I. foveata* the narrow, elongate penis valve of the male genitalia (Figs. 22, 23).

Etymology.—The species name is based on the peculiar shape of the frontal area.

***Indostegia foveata* Vasu, Saini, and Smith, new species**

(Figs. 5, 13, 15, 20, 23, 28)

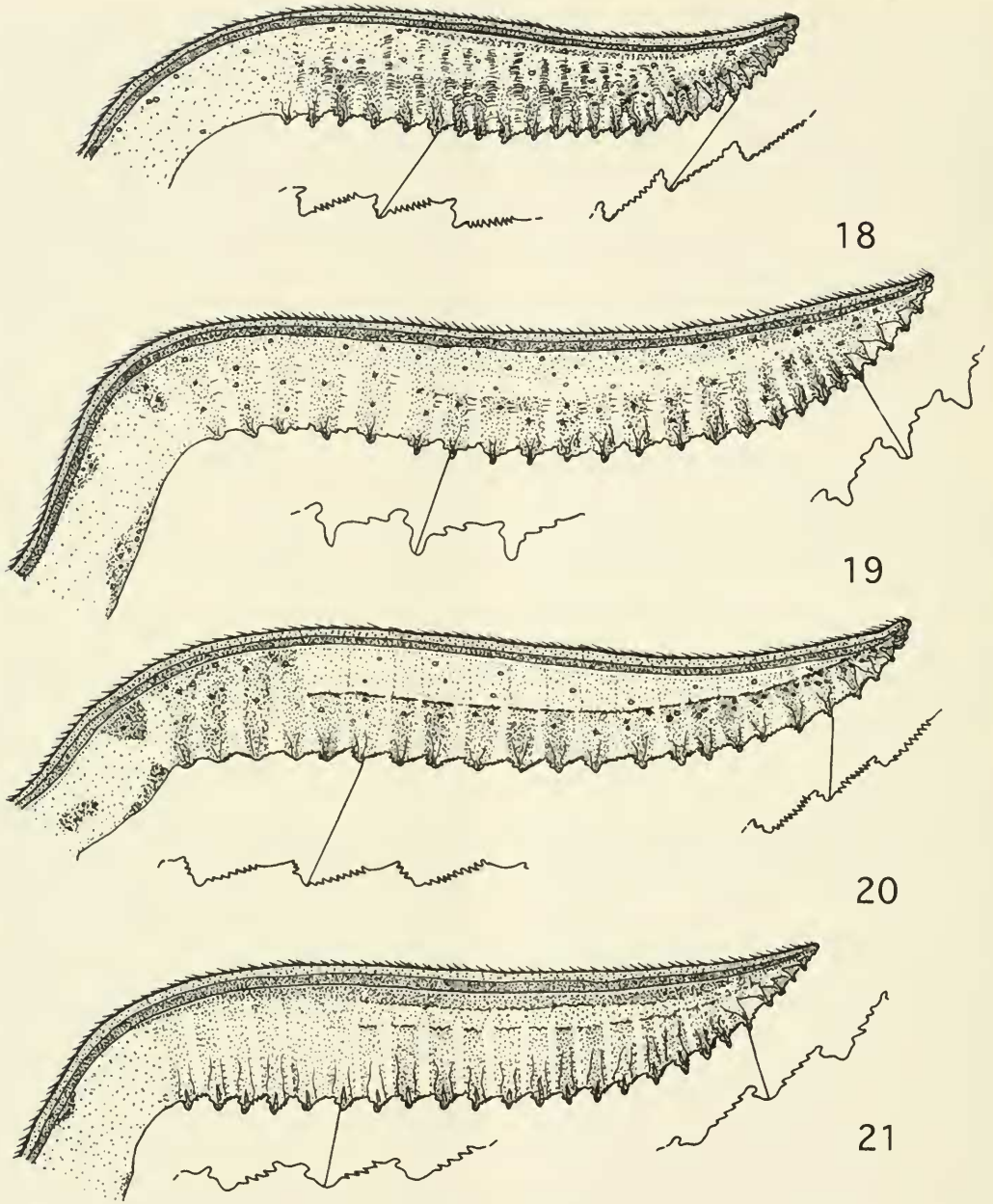
Female.—*Color:* Black with extreme apical tip of antennal segment 6 and segments 7 and 8 entirely, labrum, spot on anterior slope of mesoscutellum, longitudinal streak at center of tergites 2 and 3, extreme posterior margins and deflexed lateral sides of tergites 1–3, continuous medial broad band on sternites 2–5, and extreme apices of coxae, trochanters, and proximal margins of femora whitish yellow; scape, pedicel, antennal segment 3 more or less, dorsal aspect of segment 4, head except an irregular spot covering frontal area, ocellar region laterally not touching eye margins, posteriorly extending to hind margin of head in form of fine stripes lateral to lateral furrows, posterodorsal and posterolateral margins of pronotum, tegula, lateral margins of mesonotal middle lobe meeting at apex, band encircling whitish-yellow spot on mesoscutellum, broad rectangular spot on tergite 7 and abdominal segments 8 and 9 entirely, anterior aspects of coxae, pro- and mesofemora, outer tip of metafemur, tibiae and tarsi fuscoferruginous. Wings hyaline, costa and basal $\frac{1}{3}$ of stigma fulvous, apical $\frac{2}{3}$ of stigma and veins piceous.

Structure: Length 9.5 mm. Antennal length $3.4\times$ head width, scape length $1.25\times$ its breadth, antennal segments 3 and 4 subequal as 7:8, flagellum strongly compressed and flattened except basal 3 segments. Clypeus rectangularly incised, anterior margin smooth (Fig. 5). Malar space equal to

diameter of median ocellus; LID:IDMO:EL = 8:8:5. Frontal area raised to level of eyes, supraclypeal and supraantennal pits well marked, supraantennal tubercles and frontal ridges indistinct, median fovea broad, deep and ditchlike and posteriorly clearly reaching median ocellus, post-, inter- and circumocellar furrows distinct, lateral furrows deep, distinct and ending abruptly slightly before hind margin of head, postocellar area convex, as long as broad, with distinct longitudinal carina on anterior $\frac{1}{4}$, head considerably prolonged behind eyes OOL:POL:OC:L = 5:4:5. Mesoscutellum roundly elevated with faint medial carina on its posterior slope, its appendage with median carina; ICD:ITD = 1:3. Tarsal claw (Fig. 13) with distinct basal lobe; metabasitarsus shorter than following joints combined as 6:7, IATS:MB:OATS = 5:16:5. Lancet (Fig. 20) with 22 serrulae; serrulae serrate; annular hairs absent to indistinct. Hypopygium as in Fig. 15.

Sculpture and pubescence: Head with dense, minute, irregular punctures, most prominent on frontal region, surface subshining. Mesonotum punctured like head; mesoscutellum with dense, large, shallow punctures, surface subshining; mesoscutellar appendage with few, large punctures, surface polished. Mesopleuron rugose with dense, large, pitlike confluent punctures mostly confined to region on and around its convexity. Mesosternum and mesepimeron with fine punctures, surface shining with general oily lustre. Abdomen impunctate, subshining. Body covered with silvery pubescence.

Male.—Length 8.5 mm. Similar to female except frontal spot laterally touching eye margins and posteriorly covering most of postocellar area; clypeus, posterodorsal angles of pronotum, metatarsus, abdominal segments 2–5 except medial streak, fuscous; lateral spots and a medial spot on anterior part of tergite 5 whitish yellow. Genitalia: Penis valve (Fig. 23), genital capsule (Fig. 28).



Figs. 18–21. Female lancet. 18, *Indostegia frontata*. 19, *I. apicicornis*. 20, *I. foveata*. 21, *I. vatsi*.

Material examined.—Holotype: ♀, India, Manipur, Ukhrul, 1,800 m, 23.ix.1992. Paratype: 1 ♂ with same data as holotype. Paratype at PUP.

Distribution.—India: Manipur.

Remarks.—*Indostegia foveata* is distinguished by the postocellar area as long as

broad, the rectangularly incised clypeus with anterior margin smooth, not crenulate, and the median fovea broad, deep, ditch-like, and clearly reaching the median ocellus.

Etymology.—The species name is based on the characteristic shape of median fovea.

***Indostegia vatsi* Vasu, Saini, and Smith,
new species**

(Figs. 6, 10, 16, 21, 24, 29)

Female.—*Color*: Black with antennal segments 7 and 8, labrum, posterodorsal and posterolateral margins of pronotum, stripe along posterior margin of propodeum, deflexed lateral and extreme posterior margins of tergites 2–4, medial longitudinal band on sternites 2–6, extreme apices of coxae, trochanters, apical $\frac{1}{3}$ of metabisitarsus and following metatarsal joints entirely whitish yellow; scape, pedicel, antennal segment 3 more or less, clypeus, mandible base, head except frontal spot anteriorly extending to antennae, laterally not touching eyes, and posteriorly covering entire interocellar area, posteroventral angle of pronotum, tegula, lateral margins of mesonotal middle lobe meeting at apex, broad irregular spot anterior to mesoscutellum, mesoscutellum, parapterum, nebulous spot along posterior margin of mesosternum, tergite 9, apical $\frac{2}{3}$ of profemur, apical $\frac{1}{3}$ of mesofemur, stripe along $\frac{2}{3}$ of outer aspect of metafemur, tibiae except extreme apex of metatibia, basitarsi except apical $\frac{1}{3}$ of metabisitarsus fuscoferruginous. Wings hyaline, costa fuscoferruginous, stigma and remaining veins piceous.

Structure: Average length 9.5 mm. Antennal length $3.8\times$ head width, scape length $1.5\times$ its apical width, antennal segments 3 and 4 subequal as 8:9, flagellum strongly compressed and flattened except 3 basal segments. Clypeus (Fig. 6) with anterior margin smooth. Malar space $1.25\times$ diameter of median ocellus; LID:IDMO:EL = 7:7:4. Frontal area at level of eyes, supraclypeal and supraantennal pits well marked; supraantennal tubercles low, almost flat and posteriorly confluent with similar frontal ridges; median fovea with deep pit on its anterior half and posteriorly not reaching median ocellus, post-, inter-, and circumocellar furrow distinct; lateral furrows deep, distinct and reaching hind margin of head; postocellar area subcon-

vex, with a distinct longitudinal carina in its anterior $\frac{1}{4}$, broader than long as 5:4, head considerably widened behind eyes; OOL:POL:OCL = 2:2:3. Mesoscutellum subconvex without carina, its appendage ecarinate, ICD:ITD = 2:7. Tarsal claw (Fig. 10) with large basal lobe; metabasitarsus equal to following tarsal joints combined, IATS:MB:OATS = 5:16:4. Lancet (Fig. 21) with 26 serrulae; serrulae serrate. Hypopygium as in Fig. 16.

Sculpture and pubescence: Frontal area with very minute, insignificant punctures, rest of head impunctate, surface shining. Mesonotum shining with fine inconspicuous punctures. Mesopleuron rugose with large, dense, irregular, pitlike confluent punctures along convexity, appendage impunctate, polished. Abdomen impunctate, shining. Body covered with blackish pubescence.

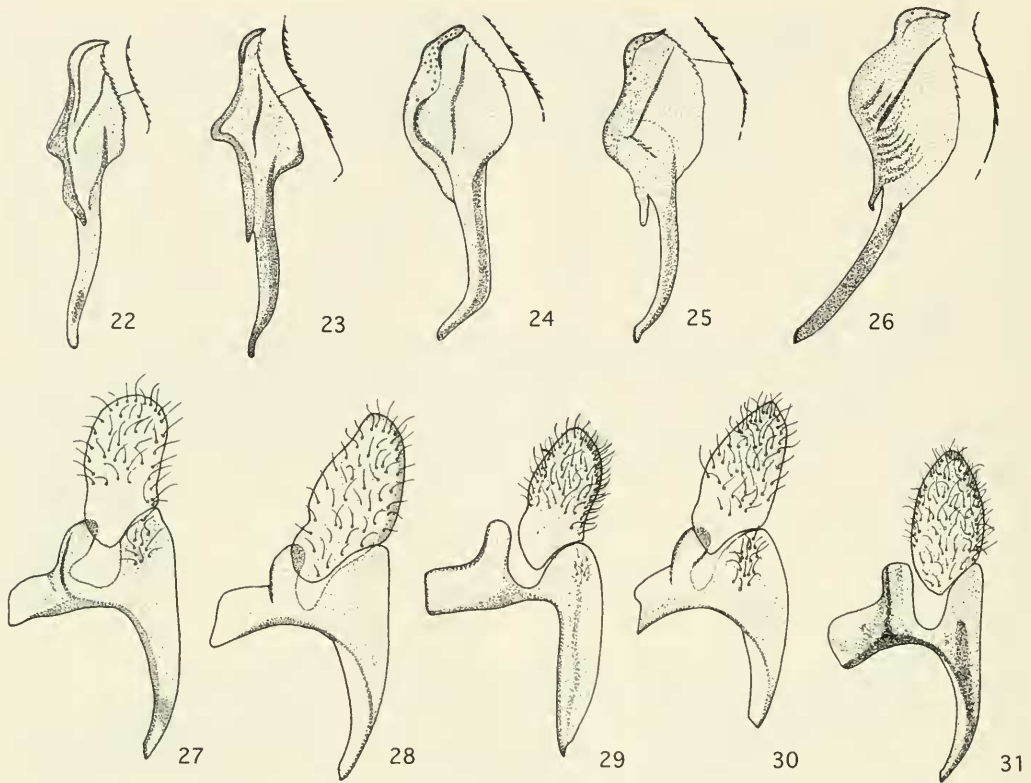
Male.—Length 8.5 mm. Similar to female except antennal segment 3 entirely black, extreme tip of antennal segment 6 whitish yellow. Frontal black spot laterally touching eyes and posteriorly extending to hind margin of head lateral to postocellar area. Fuscoferruginous spot on mesosternum missing. Genitalia: Penis valve (Fig. 24), genital capsule (Fig. 29).

Material examined.—Holotype: ♀, India, Sikkim, Gangtok, 1,700 m, 20.ix.1993. Paratypes: 1 ♀, 4 ♂ with same data as holotype; 4 ♂, India, West Bengal, Darjeeling, 2,280 m, 11.ix.1993. Paratypes at PUP.

Distribution.—India: Sikkim, West Bengal.

Remarks.—*Indostegia vatsi* is separated from other species by the broader than long postocellar area, median fovea not reaching the median ocellus, lateral furrows reaching the hind margin of head, roundly incised clypeus with the anterior margin smooth, and the ecarinate mesoscutellar appendage.

Etymology.—This species is named in memory of Late Prof. L. K. Vats of Kurukshetra University, Kurukshetra, India.



Figs. 22-31. Male genitalia. 22-26. Penis valves, lateral. 22, *I. frontata*. 23, *I. foveata*. 24, *I. vatsi*. 25, *I. ecarinata*. 26, *I. apicicornis*. 27-31. Genital capsule, ventral view of right half. 27, *I. frontata*. 28, *I. foveata*. 29, *I. vatsi*. 30, *I. ecarinata*. 31, *I. apicicornis*.

***Indostegia ecarinata* Vasu, Saini, and
Smith, new species**
(Figs. 8, 11, 25, 30)

Female.—Unknown.

Male.—*Color*: Black with antennal segments 7 and 8, labrum, clypeus except medial spot, posterodorsal margin of pronotum, extreme posterior and deflexed lateral margins of tergites 2-4, medial spot on sternites 2-5, extreme apices of coxae, trochanters and adjacent parts of femora, metatarsus except metabasitarsus whitish yellow; scape, pedicel, medial spot on clypeus, head except frontal spot extending anteriorly between antennae, laterally to eyes in its upper part and posteriorly covering intercellular area extending backwards to reach hind margin of head lateral to lateral furrows only, broad medial spot on pronotum,

tegula, lateral margins of mesonotal middle lobe meeting at apex, mesoscutellum more or less, tergite 9 entirely, sternite 7, apical $\frac{1}{2}$ of profemur, anterior to apical $\frac{1}{2}$ of mesofemur, extreme apex of anterior to apical $\frac{1}{2}$ of metafemur, tibiae except extreme outer apical tip of metatibia, pro- and mesotarsi fuscoferruginous. Wing hyaline, costa and extreme base of stigma fulvous, remainder of stigma and rest of veins piceous.

Structure: Average length, 8.0 mm. Antennal length $4\times$ head width, scape length $2\times$ its apical width, antennal segments 3 and 4 as 3:4, flagellum strongly compressed and flattened except basal 2 segments. Clypeus rectangularly incised with anterior margin smooth (Fig. 8). Malar space $1.25\times$ diameter of median ocellus; LID:IDMO:EL

= 4:4:3. Frontal area at level of eyes; supraclypeal and supraantennal pits well marked; supraantennal tubercles and frontal ridges indistinct; median fovea in form of deep pit in its anterior half and posteriorly not reaching median ocellus; post-, inter-, and circumocellar furrows very deep; lateral furrows deep, distinct and ending just before hind margin of head; postocellar area subconvex, broader than long as 6:5. Mesoscutellum roundly raised, without carina, its appendage faintly carinate, ICD:ITD = 2:5. Tarsal claw (Fig. 11) with broad basal lobe; metabasitarsus shorter than following joints combined as 6:7, IATS:MB:OATS = 5:16:4. Genitalia: Penis valve (Fig. 25), genital capsule (Fig. 30).

Sculpture and pubescence: Head with dense, minute punctures on frontal area, rest of head almost impunctate, surface shining. Mesonotum with few, sparse, inconspicuous punctures, mesoscutellum with few, large, shallow punctures on its posterior slope, appendage polished, mesopleuron rugose with large, pitlike confluent punctures on and along its convexity. Abdomen impunctate and subshining. Body covered with mixed blackish and silvery pubescence.

Material examined.—Holotype: ♂, India, Sikkim, Damthang, 1,600 m, 17.v.1993. Paratype: 1 ♂, India, Sikkim, Gangtok, 1,700 m, 20.ix.1993. Paratype at PUP.

Distribution.—India: Sikkim.

Remarks.—*Indostegia ecarinata* is distinguished from other species by the scape length twice as long as its apical width, antennal segment 3 shorter than 4, the rectangularly incised clypeus with the anterior margin smooth, and the tarsal claw with a large basal lobe.

Etymology.—The species name refers to the absence of a carina on postocellar area.

Indostegia apicicornis Malaise

(Figs. 7, 9, 17, 19, 26, 31)

Indostegia apicicornis Malaise 1934: 469.

Female.—*Color:* Black with antennal segments 7 and 8, labrum, posterodorsal

and posterolateral margins of pronotum, stripe along posterior margin of propodeum, lateral spot on tergites 2–4, medial spot on sternites 2–4, extreme apices of meso- and metacoxae, trochanters, metabasitarsus and following metatarsal joints more or less whitish yellow; scape, pedicel, clypeus, mandible base, head except frontal spot extending anteriorly to antennae, laterally not touching eyes and posteriorly covering interocellar area, posteroventral angle of pronotum, tegula, lateral margins of mesonotal middle lobe meeting at apex, broad irregular spot anterior to mesoscutellum, mesoscutellum, a nebulous spot along posterior margin of mesosternum, apical 2/5 of meso- and metafemora, tibiae, basitarsi and following tarsal segments of pro- and mesolegs fuscoferruginous. Wings hyaline, veins piceous except extreme fulvous apex of subcosta; stigma piceous.

Structure: Average length 10.0 mm. Antennal length 3.4× head width, scape length 1.25× its apical width, antennal segments 3 and 4 subequal as 8:9, flagellum strongly compressed and flattened except 3 basal segments. Clypeus (Fig. 7) subsquarely incised with anterior margin of incision crenulate. Malar space 1.5× diameter of median ocellus; LID:IDMO:EL = 3:3:2. Frontal area at level of eyes; supraclypeal and supraantennal pits well marked; supraantennal tubercles indistinct and confluent with moderately raised frontal ridges; median fovea with broad, shallow pit in its anterior half, not reaching median ocellus; post-, inter-, and circumocellar furrows distinct; lateral furrows deep, distinct and abruptly ending just before hind margin of head; postocellar area subconvex with distinct longitudinal carina on its anterior ¼, broader than long as 5:4. Head parallel behind eyes. OOL:POL:OCL = 2:2:3. Mesoscutellum subconvex without carina, mesoscutellar appendage with distinct median carina; ICD:ITD = 2:7. Tarsal claw (Fig. 9) with minute, indistinct basal lobe; metabasitarsus shorter than following tarsal joints combined as 6:7, IATS:MB:OATS = 4:10:3. Lancet (Fig.

19) with 24 serrulae; serrulae slender, lobelike. Hypopygium as in Fig. 17.

Sculpture and pubescence: Frontal area wrinkled and with dense, minute punctures, rest of head with fine, sparse punctures, surface shining. Mesonotum with minute, scattered punctures, surface shining, mesoscutellum with transverse row of large, shallow punctures on its posterior slope, surface shining, mesoscutellar appendage polished. Mesopleuron rugose with large, dense, irregular, pitlike confluent punctures on and along its convexity. Abdomen impunctate, shining. Body covered with mixed fuscous and silvery pubescence.

Male.—Average length 8.5 mm. Similar to female except frontal black spot laterally touching eye margins and posteriorly extending to hind margin of head lateral to lateral furrows; whitish yellow lateral spots on tergites 2–4 absent. Genitalia: Penis valve (Fig. 26), genital capsule (Fig. 31).

Holotype.—♀, Indian Museum, Zoological Survey of India, Calcutta; examined. From Darjeeling, Himalayas, alt. 7,000 ft., 2-VI-1917, E. Brunetti.

Specimens examined.—4 ♀, 5 ♂, India, Uttar Pradesh, Mandal, 2,300 m, 15.vi.1987; 2 ♀, 1 ♂, Kalamuni Top, 2,700 m, 26.vi.1991; 1 ♀, Munsyari, 2,290 m, 26.vi.1991; 1 ♀, 1 ♂, Chopta, 3,000 m, 25.vi.1992; 1 ♀, 5 ♂, Mastura, 1,800 m, 25.vi.1992; 1 ♂, Kilbury, 2,190 m, 22.vi.1993; 1 ♂, Meghalaya, Smit, 1,500 m, 3.v.1993; 1 ♂, Nagaland, Pfutsero, 2,100 m, 19.v.1993; 9 ♂, Manipur, Ukhrul, 1,800 m, 21.v.1993.

Variation.—Antennal segment 3 may be fuscoferruginous, and the clypeus and top of the mesoscutellum may be whitish yellow. A whitish yellow medial streak may be present on tergites 2–4, and the remaining tergites may be fulvous to fuscoferruginous. Tergites 7–9 may be whitish yellow to fuscoferruginous. The posterolateral

slopes of mesoscutellum may have large, shallow, scattered punctures.

Distribution.—India: Uttar Pradesh, Nagaland, Meghalaya, Manipur.

Remarks.—The specimens we studied run to *Indostegia* in Malaise's key (1963) and comply well with Malaise's (1934) original description and type of *I. apicicornis*. This species is characterized by the subsquarely incised clypeus with the anterior margin crenulate, the malar space longer than the diameter of the median ocellus, the postocellar area broader than long with a distinct carina, the mesoscutellar appendage with a median carina, and the tarsal claw with an indistinct or minute basal lobe. In addition, the narrow, lobelike serrulae of the lancet (Fig. 19) differ from all other species of *Indostegia*.

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